

REMARKS

This application has been carefully reviewed in light of the Office Action dated November 3, 2003. Claims 1 to 48 and 55 to 57 are in the application, of which Claims 1, 2, 3, 6, 9, 10, 15, 17 and 19 are independent. Claims 56 and 57 have been newly added. Reconsideration and further examination are respectfully requested.

Applicants thank the Examiner for the indication that Claim 2 has been allowed.

Claims 1, 3 to 48 and 55 were objected to for terms related to toluene monooxygenase and for misplaced hyphens. Any informalities in the claims have been attended to by amendment. Accordingly, withdrawal of the objections is respectfully requested.

Claims 1, 3 to 48 and 55 were rejected under 35 U.S.C. § 112, first paragraph, for allegedly containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention. The rejection is respectfully traversed.

Specifically, on pages 4 and 5, the Office Action asserted that Claims 1, 3 to 48 and 55 recite a "toluene monooxygenase" from any source. Applicants are uncertain of the pertinence of the observation, for the reason that the claims are not directed to a toluene monooxygenase, but rather to a DNA fragment or combination thereof. Applicants clearly had possession of the claimed DNA fragments (and their claimed combinations), and

therefore respectfully contend that the rejection should be withdrawn since it is not based on the language of the claims.

Moreover, Claim 1 clearly recites a source, namely *Burkholderia cepacia* KK01. As for the remaining rejected claims, they clearly refer to the sequences found throughout the specification such that the “source” of toluene monooxygenase is of no moment.

Accordingly, Applicants submit that the specification sufficiently describes the claimed invention in a manner that a person of ordinary skill in the art would recognize that Applicants were in possession of the claimed invention, and withdrawal of the rejection is requested.

In addition, page 4 of the Office Action asserts that the scope of the phrase “deletion, substitution or addition of one or more bases from cloning” renders the scope of the DNA fragments in Claims 3, 9, 10, 17 and 55 undefined. In response, Applicants have amended these claims to make clear that the DNA fragments of these claims include deletion, substitution of one to four bases and not one or more bases.

Support for the amended feature of “deletion, substitution or addition of one to four bases” is found in the specification, such as in Examples 6 and 7. In Example 6, four primers (SEQ ID NOS: 9, 10, 11 and 12) introduced the NcoI site (CCATGG) to the tomK and tomL coding regions of SEQ ID NO: 1. Specifically, the tom-K2 primer introduced CCATGG to replace TCATGA in tomK (an example of substitution of two bases) while the tom-L2 primer introduced CCATGG to replace AAGTGA of tomL (an example of substitution of four bases). In view of the foregoing, withdrawal of the § 112, first paragraph, rejection is respectfully requested.


Claims 3 to 5, 9 to 14, 17, 18, 21 to 48 and 55 were rejected under 35 U.S.C. § 112, second paragraph, for alleged indefiniteness. In response, Claims 3, 9, 10, 13, 17 and 55 have been amended to attend to the rejection. Accordingly, withdrawal of the § 112, second paragraph, rejection is respectfully requested.

Claims 3 to 5, 9 to 14, 17, 18, 21 to 48 and 55 were rejected under 35 U.S.C. § 102(b) over U.S. Patent 5,543,317 (Shields). Claims 3 to 5, 9 to 14, 17, 18, 21 to 48 and 55 were also rejected under the judicially created doctrine of obviousness-type double patenting over Claims 2 to 19 of U.S. Patent 6,472,191 (Yano). The rejections are respectfully traversed, since as shown above, the rejected claims have all been amended to recite sequences with a high homology, such that the rejections cannot be sustained.

No other matters being raised, it is believed the entire application is fully in condition for allowance, and such action is courteously solicited.

Applicant's undersigned attorney may be reached in our Costa Mesa,
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Respectfully submitted,



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